Bluetooth GPS Nav Kit™

Bluetooth GPS Receiver with In-Car Navigation Software for Pocket PCs

User's Guide

socket
The Mobile Connection

Table of Contents

Chapter 1 **Introduction**

If you're constantly on the road but hate to hassle with paper maps, let the Socket Bluetooth GPS Nav Kit steer you in the right direction. It's the ideal solution for in-car navigation with a Pocket PC.

The in-car navigation software features human voice prompts, including detailed turn-by-turn directions. The software automatically re-calculates your journey in case you veer off course. Plus, the maps have special icons to show points of interest like restaurants, airports or museums. It's a great solution for door-to-door routing or just visiting unfamiliar territory.

All you need is a Bluetooth-enabled Pocket PC 2000 or Pocket PC 2002. The included Bluetooth GPS Receiver allows you to take advantage of your Pocket PC's Bluetooth capability to wirelessly add GPS positioning technology. If your Pocket PC does not have Bluetooth functionality, it's easy to add with Socket's Bluetooth Connection Kit (CompactFlash or SDIO card with user-friendly software).

This *User's Guide* explains how to install and use the Bluetooth GPS Nav Kit. Pocket PC 2002 screens are shown. Except where otherwise noted, Pocket PC 2000 screens will be functionally equivalent.

Socket highly recommends that all users register their product. Registered users receive priority for technical support and upgrades on map data. You can register online at: www.socketcom.com/prodreg/

For software updates, please visit: www.socketcom.com/product/gps.asp

Package Contents
The Socket Bluetooth GPS Nav Kit package includes:
- Socket Bluetooth GPS Receiver
- Socket MyNavigator installation and map software on CD-ROM
  (The U.S. version includes 2 CDs; the U.K. version includes 1 CD.)
- Quick Start Guide
- DC power charger with extra cord
- Leather case for Bluetooth GPS Receiver

Hardware Diagram

External
antenna port

Bluetooth
status LED
(blue)

GPS
status LED
(green)

Battery
status LED
(red/yellow)

Power
switch

Power
jack

Hardware Features

Power Switch

■ Power ON   ○ Power OFF

Power Jack

The power jack lets you connect to either a DC (included) or AC (not included) power charger to recharge the internal battery. AC adapters are available separately from Socket under Accessories at www.socketcom.com/shop/default.asp

The AC and DC adapters of most recent Pocket PCs from Casio, Compaq, Dell, Fujitsu, and Toshiba are also compatible. Please note that the DC adapter rating is 5V, 1A, positive pole center.

External Antenna Port

If you have an external antenna with a male MCX connector, you can use it instead of the Bluetooth GPS Receiver's internal antenna. Simply plug your external antenna into the antenna port.

External antennae are available separately from Socket under Accessories at www.socketcom.com/shop/default.asp.

Bluetooth Status LED (Blue)

Blinking — Bluetooth radio is on and transmitting.

GPS Status LED (Green)

Blinking — GPS position is fixed.
Steady light — GPS position not fixed.

Battery Status LED (Red/Yellow)

Red — Running on battery power, which will be used up within approximately five minutes. Charge immediately.

Yellow — Connected to power charger. Battery is only partially full.

LED off — If connected to power charger, battery is fully charged. If not connected to power charger, device is running on battery power, and battery has adequate power supply.

Chapter 2 **Installation & Usage**

Installation Steps Summary

STEP 1: Charge the receiver battery.
STEP 2: Install the software.
STEP 3: Load maps onto your Pocket PC.
STEP 4: Connect the receiver and Pocket PC via Bluetooth.
STEP 5: Make sure there is a GPS fix.
STEP 6: Navigate to your destination.

STEP 1: Charge the Receiver Battery

1. Before you can use the Bluetooth GPS Receiver, the battery must be charged. Use the included DC power charger to charge the battery from your car's cigarette lighter port, or use the AC charger (available separately) to charge from an electrical outlet. As the device is charging, the Battery Status LED will show a yellow light.

2. When the battery is fully charged, the Battery Status LED will turn off. Unplug the device and remove the charger.

   A fully charged battery should provide a minimum of 6 hours of operation.

STEP 2: Install the Software

Follow these instructions to install the Socket MyNavigator software:

1. Make an active connection between the Pocket PC and a host PC (e.g., via ActiveSync).

    An active connection exists if data can move between the Pocket PC and host PC via a serial/Ethernet/USB cable or cradle.

2. Insert the Socket MyNavigator Installation CD into your host PC. If you are using the Nav Kit for the U.S., insert Disk 1.

    Note: The host PC can be a desktop or notebook PC.

3. Use My Computer or Windows Explorer to access the CD-ROM drive. In the CD, click on SETUP.EXE.

4. Follow the instructions on your screen to install the software.

5. When software installation is complete, you are now ready to load maps onto your Pocket PC. Do not disconnect your Pocket PC from the host PC.

STEP 3: Load Maps onto Your Pocket PC

Before you can use MyNavigator with the Socket Bluetooth GPS Receiver to navigate, you need to load maps onto your Pocket PC. You can load maps into either the main memory of your Pocket PC or onto a memory card.

Please note that maps covering large areas can require several megabytes of memory. Map Loader conveniently detects and reports how much space is available on your main memory and/or memory card. If you have a lot of storage space available, you can choose to load maps by state/region. If you have only limited storage space available, you can choose to load the maps for a particular city.
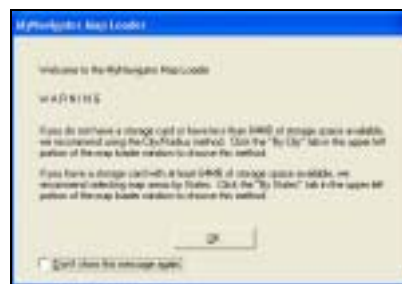
Starting the Program

1. Make sure you still have an active connection between your Pocket PC and host PC (e.g., via ActiveSync).

2. After you install the software, the MyNavigator Map Loader will automatically launch on your host PC.

   Note: To access Map Loader again, tap on the MyNavigator Map Loader icon on your desktop. Alternatively, you can go to:

   Start | Programs | Socket Communications | MyNavigator | Map Loader.

   Map Loader

3. A warning screen will appear, recommending different map loading options depending on the memory resources available on your Pocket PC. Read the warning, then click OK.

4. Make sure the appropriate Socket CD is inserted into your host computer.
   - If you are using the U.S. Nav Kit, insert Disk 1 for maps of the western half of the U.S. Insert Disk 2 for maps of the eastern half.
   - If you are using the U.K. version, your kit includes only one CD. Make sure it is still inside the host computer.

By States/Region

If you have a storage card with at least 64 MB available, use the By States or By Region screen. If you are using the U.K. version of MyNavigator, please substitute "region" for "state" in the following instructions.

1. Select the state(s) appropriate for your trip. You can either click directly on the map, or you can scroll and use the check boxes on the right. If selecting multiple states, select states that are adjacent to each other. If you select states that are not adjacent, the software will also load maps for all the states in between.
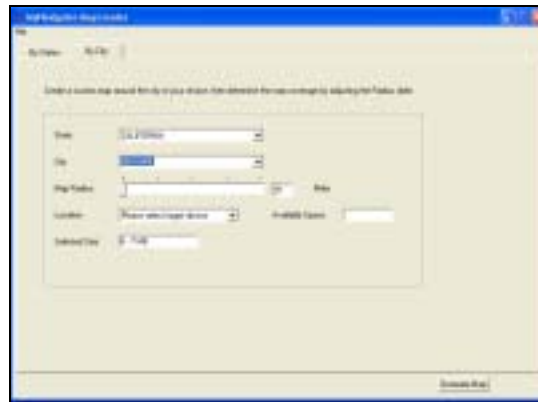

Note: The U.S. version is shown. The U.K. version is functionally equivalent.

2. The total file size for the maps you selected will appear in the Selected Size field at the bottom of the screen.

3. In the Location drop-down menu at the bottom of the screen, select Pocket PC Storage Card.

4. A Storage Card Selection screen will appear. Use the drop down menu to select the storage card you want to use. Click OK.

5. The amount of memory available on your storage card will appear in the Available Space field at the bottom of the screen. Make sure your card has enough available space for the selected maps. Click Generate Map.

6. The Generating Map screen will appear on the host PC. Map files will begin to transfer to your Pocket PC. Depending on the size of the files being transferred and the speed of your connection, the transfer may take several minutes.

7. When map installation is complete, click OK.

8. Disconnect the Pocket PC from the host PC (e.g., disconnect from ActiveSync). Soft reset the Pocket PC by pressing the reset button.

By City

If you do not have a storage card or have less than 64 MB of storage space available, use the **By City** screen. If you are using the U.K. version of MyNavigator, please substitute "region" for "state" in the instructions. below

1. Click on the **By City** tab at the top of the screen.

2. In the **State** drop-down menu, select the state where the city is located.

3. A list of cities in the selected state should appear in the **City** drop-down menu. Select the city you would like to load maps for. You can either scroll to select the city or click in the field and type the name of the city.

4. In the **Map Radius** field, scroll to select the radius of the map. You can choose between 25 and 125 miles, in 25-mile increments.

5. The total file size for the maps you selected will appear in the **Selected Size** field at the bottom of the screen.

6. In the **Location** drop-down menu, select either **Pocket PC Storage Card** or **Pocket PC Main Memory**.

   - If you selected **Pocket PC Storage Card**, a **Storage Card Selection** screen will appear. Use the drop down menu to select where you want to store the maps. Click **OK**.

7. The amount of memory available on your storage card will appear in the **Available Space** field. Make sure your card has enough available space for the selected maps. Click **Generate Map**.

8. The **Generating Map** screen will appear on the host PC. Map files will begin to transfer to your Pocket PC. Depending on the size of the files being transferred and the speed of your connection, the transfer may take several minutes.

9. When map installation is complete, click **OK**.

10. Disconnect the Pocket PC from the host PC (e.g., disconnect from ActiveSync). Soft reset the Pocket PC by pressing the reset button.

STEP 4: Connect Receiver and Pocket PC via Bluetooth

1. Turn on the Bluetooth GPS Receiver via the power switch.

2. The Bluetooth Status LED will blink blue to show that the Bluetooth radio is on.

   Note: For best results, you should also obtain a GPS fix now. The GPS status LED will blink green when a GPS fix is achieved.

3. Perform a Bluetooth device discovery on your Pocket PC to find the Bluetooth GPS Receiver. Refer to the user documentation for your Bluetooth device for instructions.

4. Pair and bond with the Bluetooth GPS Receiver. While bonding, when your device requests a passkey, enter **0183**. Refer to the user documentation for your Bluetooth device for instructions.

   Note:

   - *If you are using a Socket Bluetooth Card, you must set the Bluetooth GPS Receiver as your Favorite COM Port. From the Bluetooth Devices folder, tap* Tools | My Favorites | COM Port *and select the* BTGPS *as your favorite COM port device.*

   - *You only need to discover, bond with, and pair with the Bluetooth GPS Receiver the first time you use it with MyNavigator.*

5. Start the MyNavigator program on your Pocket PC. Tap Start | Programs | My Navigator.

6. A warning screen will appear. Read the warning, then tap OK.

7. The Bluetooth connection for MyNavigator must be set to the correct COM port. Depending on the device you are using for Bluetooth connectivity, you may or may not need to modify the COM port setting.

Note: The baud rate must be set to 4800 to work with the Bluetooth GPS Receiver. This is the default baud rate and needs no modification.

No modifications needed
You do NOT need to modify the COM port setting if you are using one of the following devices for Bluetooth connectivity:

- Socket Bluetooth Card: If you are using the Socket Bluetooth Card and already set the Bluetooth GPS Receiver as your favorite Serial COM device, then MyNavigator will automatically detect and use the appropriate COM port.

- iPAQ 3870 series, 3970 series, 5450 series: The MyNavigator default is COM8, which is compatible with these iPAQ Pocket PCs.

Modifications needed to access the correct COM port
If you are not using one of the Bluetooth devices listed above, then you must modify the COM port setting in MyNavigator to work with your Bluetooth device. To modify the COM port setting:

a) Determine which COM port number your Bluetooth device uses for serial COM port connections. If necessary, refer to the user documentation for your Bluetooth device.

b) At the bottom of the screen, tap Tools | GPS Options | COM Port.

c) Select the correct COM port for your Bluetooth device.

STEP 5: Make Sure There is a GPS Fix

If you have not done so already, make sure that the receiver has a GPS fix.

1. When you first turn on the Bluetooth GPS Receiver, the GPS Status LED will initially show a steady green light to show that the GPS position has not been fixed yet. The first time you use the Bluetooth GPS Receiver, it may take few minutes to fix a GPS position.

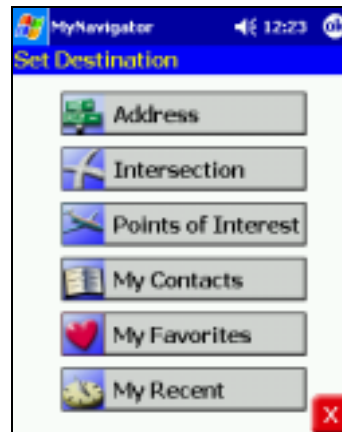2. After the GPS position is fixed, the GPS Status LED will blink green.

Note: If you have trouble obtaining a GPS fix, make sure that the Bluetooth GPS Receiver has a direct line of sight to the sky. Certain metals such as lead (e.g., in lead-based paint) can block GPS signals from the receiver.

STEP 6: Navigate to Your Destination

MyNavigator offers several methods for setting the destination you would like to navigate towards. You can enter a destination via:

A. Address
B. Intersection
C. Points of Interest (POIs)
D. My Contacts
E. My Favorites
F. My Recent
G. Selecting a location on the map

Note: For help using MyNavigator, tap File | Help.

When relevant, these screens include a custom keypad that you can tap on to enter information. The MyNavigator keypad is user-friendly for people on the go with large, easy-to-read keys and different color groupings. If you prefer, you can use your Pocket PC's virtual keyboard instead. Tap Tools | Input Options to select your preference.

A — Enter Destination by Address

If you know the city, street, and house number of your destination, you can choose to enter a destination by address.

1. Tap **Menu | Destinations | Address**.

Alternatively, you can tap **File | Enter Destination | Address**.

2. The **Select Input Method** screen will appear. At the top of the screen, the state/region of your destination will appear.
   - To change the state/region, click on the **Change** button.
   - If the correct state/region appears, you can enter your destination by tapping either **Street First** or **City First**.

3. Screens will appear for you to enter the address information that you know.

   If you select **Street First**, you will see the following screens:
   - Enter Street Name
   - Enter House Number

   If you select **City First**, you will see the following screens:
   - Enter City Name
   - Enter Street Name
   - Enter House Number

Enter City Name or Street Name

You have two options for entering information into these screens:

- Tap on the keyboard to enter the name. The list will automatically modify with each character you enter to show matching names.
- Scroll through the list.
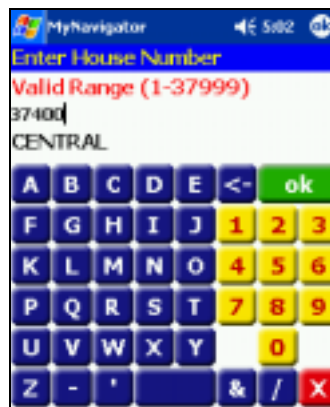

After you enter the correct information, tap ok.

To return to the previous screen, tap X.

Note:

- *In the* Enter Street Name *screen, enter only the name of the street. Do not enter the street type (e.g., avenue, road, boulevard, etc.).*

- *The* Enter City Name *screen will appear only if you selected* City First. *After you enter the city name and tap* ok, *the* Enter Street Name *will appear with a list including only streets of the city you selected.*

Enter House Number
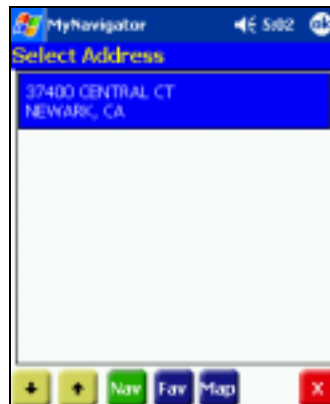
The Enter House Number screen will report the Valid Range of house numbers for the street you selected. Tap on the keyboard to enter the house number.

After you enter the correct information, tap ok.

To return to the previous screen, tap X.

4. After you enter the address information, the **Select Address** screen will appear, listing all addresses that match your criteria. Select the correct address. Tap on the **Nav** button or tap **ok**.

5. The Pocket PC will look for a GPS signal and calculate directions. After several seconds, a map will appear. Navigation instructions will begin both on-screen and via voice commands. Follow the navigation instructions to travel to your destination.

B — Enter Destination by Intersection

1. Tap Menu | Destinations | Intersection.

   Alternatively, you can tap File | Enter Destination | Intersection.

2. The Select Input Method screen will appear. At the top of the screen, the state/region of your destination will appear.
   - To change the state/region, click on the Change button.
   - If the correct state/region appears, you can enter your destination by tapping either Street First or City First.

3. Screens will appear for you to enter the address information that you know.

   If you select Street First, you will see the following screens:
   - Enter Street Name
   - Enter 2nd Street Name

   If you select City First, you will see the following screens:
   - Enter City Name
   - Enter Street Name
   - Enter 2nd Street Name

Enter City Name, Street Name or 2nd Street Name

Enter City Name, Street Name or 2nd Street Name
You have two options for entering information into these screens:

- Tap on the keyboard to enter the name. The list will automatically modify with each character you enter to show matching names.
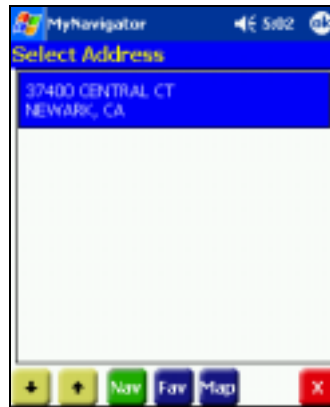- Scroll through the list.

After you enter the correct information, tap **ok**.

To return to the previous screen, tap **X**.

Note:

- *In the* Enter Street Name *screens, enter only the name of the street. Do not enter the street type (e.g., avenue, road, boulevard, etc.).*

- *The* Enter 2nd Street Name *screen will only list names of streets that intersect with the first street name you entered.*

- *The* Enter City Name *screen will appear only if you selected* City First. *After you enter the city name and tap* ok, *the* Enter Street Name *will appear with a list including only streets of the city you selected.*

4. The Select Address screen will appear, listing all the addresses that match your criteria. Select the correct address. Tap on the Nav button, or tap ok.

5. The Pocket PC will look for a GPS signal. After several seconds, a map will appear. Navigation instructions will begin both on–screen and via voice commands. Follow the navigation instructions to travel to your destination.

C — Enter Destination from Points of Interest (POIs)
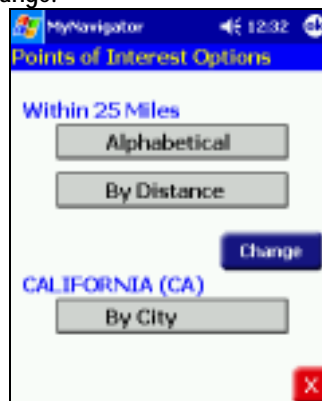
1. Tap **Menu** | **Destinations** | **Points of Interest**.

   Alternatively, you can tap **File** | **Enter Destination** | **Points of Interest**.

2. The **Points of Interest** screen will appear, listing several categories of points of interest. Tap on the type of point of interest that you would like to navigate to.

3. The **Points of Interest Options** screen will appear. Tap on the method by which you would like to search for your point of interest.

   - **Within 25 miles** of your current location, you can select a point of interest either by an **Alphabetical** search or **By Distance**.

   - Within the specified state/region, you can search **By City**. To change the state, tap on **Change**.

4. The next screens will vary depending on which point of interest option you selected.

   ➢ IF YOU SELECTED **ALPHABETICAL** OR **BY CITY**, first enter the city and/or POI name. Afterwards, the POI Select screen will appear, from which you can generate navigation instructions.

   (a) Enter City Name and/or POI Name
   You have two options for entering information into these screens:
   - Tap on the keyboard to enter the name. The list will automatically modify with each character you enter to show matching names.
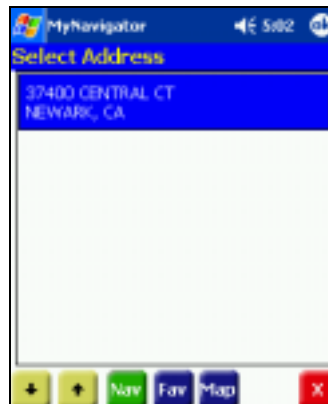   - Scroll through the list.

After you enter the correct information, tap **ok**.

To return to the previous screen, tap **X**.

   (b) Confirm the POI and generate a map
   The **POI Select** screen will appear with the address and telephone number (if available) of the point of interest. If this is the correct point of interest, tap **Nav** or **ok** to generate navigation instructions.

➢ IF YOU SELECTED **BY DISTANCE**, a POI List will appear. The distance of each point of interest from your current location will be displayed. Scroll through the list and tap to select the point of interest. Tap Nav or ok to generate navigation instructions.

After you select the point of interest, tap Nav or ok.

To return to the previous screen, tap X.

5. The Pocket PC will look for a GPS signal and calculate directions. After several seconds, a map will appear. Navigation instructions will begin both on-screen and via voice commands. Follow the navigation instructions to travel to your destination.

D — Enter Destination from My Contacts

You can select an address in the your contacts database to navigate to.

1. Tap Menu | Destinations | My Contacts.

   Alternatively, you can tap File | Enter Destination | My Contacts.

2. The Enter Contact Name screen will appear. You have two options for entering information:
   - Tap on the keyboard to enter the name. The list will automatically modify with each character you enter to show matching names.
   - Scroll through the list.

   After you select a contact, tap ok.

   To return to the previous screen, tap X.

3. The next screen will display the contact name and any address(es) associated with it.

   Tap on the address you want to navigate to. The Pocket PC will look for a GPS signal and calculate directions. After several seconds, a map will appear. Navigation instructions will begin both on-screen and via voice commands. Follow the navigation instructions to travel to your destination.

   If the contact does not have the address you want, tap X to return to the previous screen.

E — Enter Destination from My Favorites

You can select an address that you have designated as a favorite. For instructions on how to create a favorite destination, refer to Chapter 3, "Navigation Screens & Options."

1. Tap Menu | Destinations | My Favorites.

    Alternatively, you can tap File | Enter Destination | My Favorites.

2. A list of favorite destinations will appear. Scroll through the list and select the destination you want. Tap Nav or ok.

    If the list does not include the destination you want, tap X to return to the previous screen.

3. The Pocket PC will look for a GPS signal and calculate directions. After several seconds, a map will appear. Navigation instructions will begin both on-screen and via voice commands. Follow the navigation instructions to travel to your destination.

F — Enter Destination from My Recent

You can select an address that you have designated as a favorite.

1. Tap Menu | Destinations | My Recent.

    Alternatively, you can tap File | Enter Destination | My Recent.

2. A list of recent destinations will appear. Scroll through the list and select the destination you want. Tap Nav or ok.

    If the list does not include the destination you want, tap X to return to the previous screen.

3. The Pocket PC will look for a GPS signal and calculate directions. After several seconds, a map will appear. Navigation instructions will begin both on-screen and via voice commands. Follow the navigation instructions to travel to your destination.
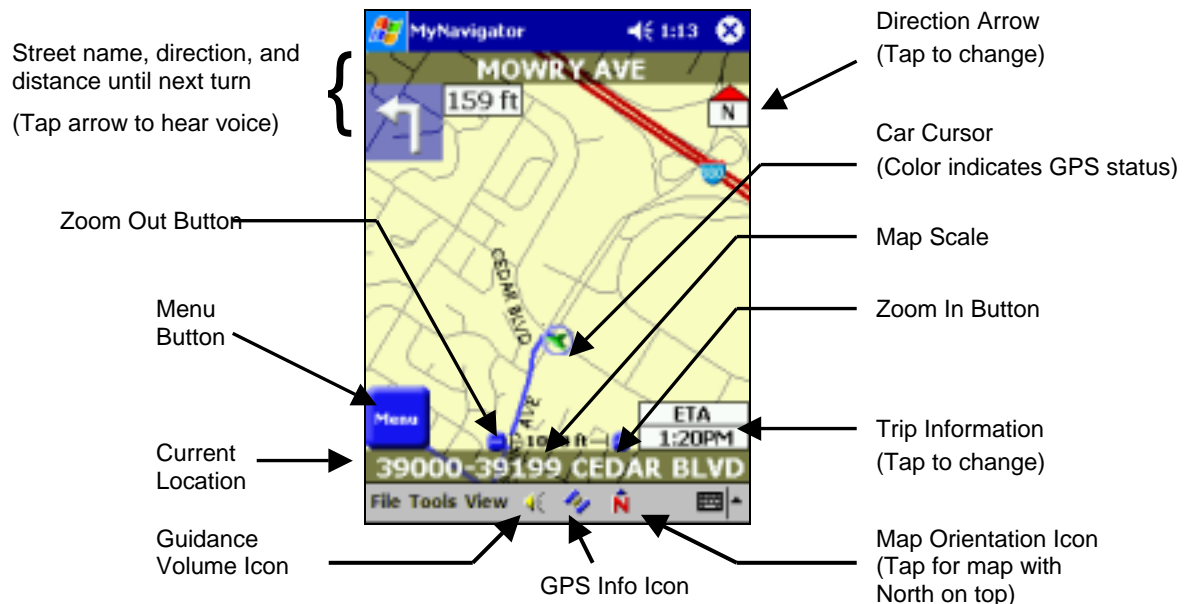
G — Enter Destination by Tapping on the Map

You can select a destination by tapping on any point on the map screen.

1. Tap on your desired destination on the map screen.

2. In the screen that appears, verify the address of your desired destination.

3. The Pocket PC will look for a GPS signal and calculate directions. After several seconds, a map will appear. Navigation instructions will begin both on-screen and via voice commands. Follow the navigation instructions to travel to your destination.

Chapter 3 **Navigation Screens & Options**

Map Screen

This is the primary navigation screen. Please note that information about an upcoming turn will appear only if you have entered a destination and a route has been calculated.

Direction Arrow
(Tap to change)

Street name, direction, and distance until next turn

(Tap arrow to hear voice)

Car Cursor
(Color indicates GPS status)

Zoom Out Button

Map Scale

Menu Button

Zoom In Button

Current Location

Trip Information
(Tap to change)

Guidance Volume Icon

Map Orientation Icon
(Tap for map with North on top)

GPS Info Icon

Action	Method
Switch between Map Screen, Guidance View, and Route List	Use the left/right hardware buttons
Zoom in and zoom out	There are three methods of zooming in/out: (1) Use the up/down hardware buttons, (2) Tap on the zoom in/zoom out buttons, and (3) Tap View | Zoom +/-. You can only zoom on the Map Screen.
Pan around the map	Tap and drag the map screen. To return to the Map Screen with your current location, tap X.
View GPS status via car cursor	Green indicates strong GPS signal. Yellow indicates insufficient signal. Red indicates no signal.
Toggle between North arrow and direction arrow	Tap on arrow. Alternatively, you can tap on the Map Orientation icon at the bottom of your screen.
Toggle trip information display	If no destination is entered, the Trip Information box will only show Speed. After entering a destination, tap on the box to toggle between Speed, ETA (estimated time of arrival), REM (remaining time), and DIST (distance to destination).

Guidance View

To switch to the Map Screen or Route List, press the left/right hardware buttons.

Distance to next movement

Route indicated in blue

Car Cursor

(Color indicates GPS Status)

Route List

To return to the Map Screen, you can press the left/right hardware buttons, tap Map or tap X.

GPS Information

To access the GPS Information screen, you can tap on the GPS Info icon at the bottom of the screen or tap View | GPS Info.

The GPS Information screen displays information on the status of the GPS receiver, including its current position and speed. The green color indicates a good signal, while red and gray indicate insufficient signals.

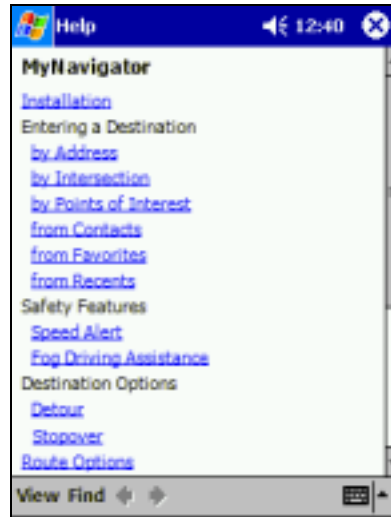## Almanac

To access the Almanac screen, tap View | Almanac.

The Almanac screen provides information about the sun and moon.

Help Files

If you have trouble using MyNavigator, the software includes Help files for your convenience.

To access the Help files, simply tap File | Help. A list of the different Help files will appear.

Favorite Destinations

MyNavigator lets you add destinations to your Favorites list. After adding a favorite destination, you can give it a custom name.

To add a destination to your Favorites list you can either:

* Enter a new destination (via address, intersection, POI, etc.), then tap Fav at the bottom of the screen. In the confirmation screen, tap OK.

* Select a recent destination and tap Fav at the bottom of the screen. In the confirmation screen, tap OK.

To give a favorite destination a new name:

1. Tap Menu | Destinations | My Favorites.

2. Select a destination in the list and tap Edit at the bottom of the screen.

3. Tap on the keyboard to enter a name. In the confirmation screen, tap OK.

Route Options

To modify how MyNavigator calculates routes:

1. Tap Menu | Route Opts.

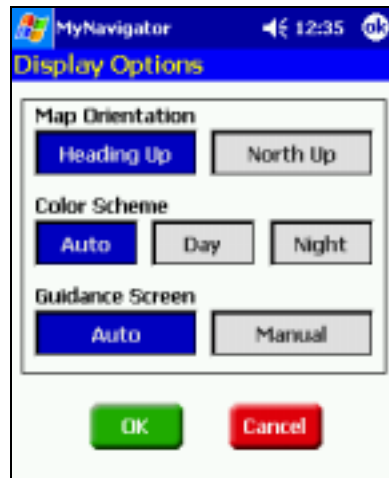2. In the Route Options screen, select the desired options and tap OK.

- Method: Selects the method of routing — the quickest route, shortest route or a route that favors major or local roads

- Toll Roads: Selects whether toll roads should be included or excluded in the route calculation

- Carpool: Selects whether carpool lanes (High Occupancy Vehicle lanes) should be included or excluded in the route calculation

Display Options

To change the display options of MyNavigator:

1. Tap Menu | Display Opts.

2. In the Display Options screen, select the desired options and tap OK.
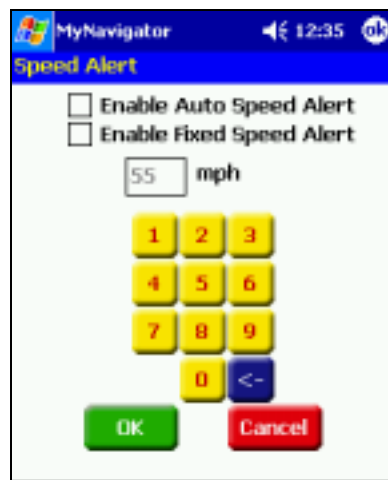

- • Map Orientation: Orients the Map Screen so that either the driving direction or North is always pointing up

- • Color Scheme: Sets color scheme to Day or Night mode. Auto setting changes from Day to Night mode automatically at approximately sunrise and sunset

- • Guidance Screen: Sets the Guidance screen to appear either automatically while approaching a turn or whenever manually selected

Speed Alert Options

Speed Alert notifies you with an audible sound when you have exceeded the target speed. You can either select a speed as your target speed, or you can have MyNavigator automatically set the target speed according to the speed class of the roadway.

WARNING! Auto Speed Alert (using the roadway speed class) should be used for information only! DO NOT use Auto Speed Alert as an indicator for legal speed limits or safe driving speeds. Drivers should abide by the law and use good judgment for safe driving at all times.

1. Tap Menu | Speed Alert.

2. To let MyNavigator set the target speed according to the speed class of the roadway, check the Enable Auto Speed Alert box.

   To specify your own target speed, check the Enable Fixed Speed Alert box and tap on the numeric keypad to enter your target speed.
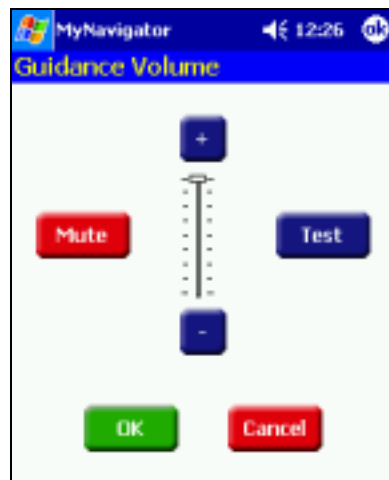
3. Tap OK.

Guidance Volume

To modify the volume of the voice commands:

1. To access the Guidance Volume screen, do any of the following:
   - Tap Menu | Volume.
   - Tap Tools | Guidance Volume.
   - From the Map Screen, Guidance View, or Route List, tap on the Volume icon at the bottom of the screen.

2. Select the volume and tap OK.

Appendix A **Specifications**

General Characteristics:
Dimensions: 50 x 90 x 16 mm
Mass: 61 g (650 mA version)
Chipset: Sirf Star IIe/LP
Frequency: L1, 1.575.42 MHz
C/A: 1.023 MHz chip rate
Channels: 12 Channels all-in-view tracking
Antenna Type: Built-in Ceramic patch   antenna (External antenna optional)

Accuracy (without DGPS):
Position: 10 m, RMS, 25 m CEP without SA
Velocity: 0.1 m/sec without SA
Time: 1 microsecond synch. to GPS time

Acquisition Rate (Open sky, stationary):
Reacquisition: 0.1 sec, average
Cold Start: < 80 sec, average
Warm Start: < 45 sec, average
Hot Start: < 10 sec, average

Dynamic Conditions:
Altitude: < 18,000 m
Velocity: < 515 m/sec
Acceleration: < 4 g

Environmental:
Operating Temperature: -20°C to +60°C
Relative Humidity: 5% to 95%, non-condensing

Interface:
Connection: Communication with host platform via Bluetooth Serial Profile
Protocol: NMEA-0183 V2.20 38.4 kbps baud

Power Source:
Built-in rechargeable lithium ion battery with 5V DC input charging circuit (650 mA)

Operation Time:
6 hrs minimum after full charge

Operating System Support:
Windows CE 3.0 for Pocket PC 2000 and Pocket PC 2002

Appendix B **Support Resources**

Technical Support

If you have trouble installing or using the 56K Modem Card, contact Socket's technical support department. Please note that technical support is available in English only.

IMPORTANT! To obtain technical support for your product, you must first register your product online at **www.socketcom.com/prodreg**.

Once you have registered your product, you can contact Socket's technical support department by doing either of the following:

- <u>Submit an email inquiry through the online support system</u>. After you register your product, you will be presented with an option to 'submit a problem'. Click on this option to follow the online process to submit an email request for technical support.

  This is the fastest way to obtain technical support and has the quickest turnaround time. Registered customers who submit a question online will receive priority service. If we are unable to resolve your support inquiry via email, we can arrange for a technical support representative to call you at a specific time.

- <u>Call our technical support line at 510-744-2720 to leave a message for a technical support representative to return your call at a specific time and number</u>. When you call, please leave your email address that you registered under, a phone number and time that you can be reached at, and a detailed description of your problem.

  After you register your product, you can use the product registration webpage to submit an email inquiry directly to a technical support specialist for priority service, view product information, register additional products, view a complete database of FAQs and view a history of technical support activity for previous support issues.

Users' Forum

If you would like to discuss the Socket Bluetooth GPS Nav Kit with other users, visit Socket's users' forum at: www.socketforum.com

Important! Socket DOES NOT provide technical support via the users' forum!!!

Note: Socket may, but is not obligated to, monitor or review any areas on the Site where users transmit or post Communications or communicate solely with each other, including but not limited to the user forum, and the content of any such Communications. Socket, however, will have no liability related to the content of any such Communications, whether or not arising under the laws of copyright, libel, privacy, obscenity, or otherwise. Socket retains the right to remove messages that include any material Socket deems abusive, defamatory, obscene or otherwise unacceptable.

Please refrain from disassembling the Bluetooth GPS Receiver. Disassembly of this device will void the product warranty.

Limited Warranty

Socket Communications Incorporated (Socket) warrants this product against defects in material and workmanship, under normal use and service, for the following period from the date of purchase:

Bluetooth GPS Receiver: 3 years

Incompatibility is not a defect covered by Socket's warranty. During the warranty period, Socket will, at its option, repair or replace the defective product at no charge when furnished with proof of retail purchase, provided that you deliver the product to Socket or to an authorized Socket Service Center.

The returned product must be accompanied by a return material authorization (RMA) number issued by Socket or by Socket's Authorized Service Center. If you ship the product, you must use the original container or equivalent and you must pay the shipping charges to Socket. Socket will pay shipping charges back to any location in the contiguous United States. This warranty applies only to the original retail purchaser and is not transferable.

Socket may, at its option, replace or repair the product with new or reconditioned parts and the returned product becomes Socket's property. Socket warrants the repaired or replaced products to be free from defects in material or workmanship for ninety (90) days after the return shipping date, or for the duration of the original warranty period, whichever is greater.

This warranty does not cover the replacement of products damaged by abuse, accident, misuse or misapplication, nor as a result of service or modification other than by Socket.

SOCKET IS NOT RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM BREACH OF ANY EXPRESS OR IMPLIED WARRANTY, INCLUDING DAMAGE TO PROPERTY AND, TO THE EXTENT PERMITTED BY LAW, DAMAGES FOR PERSONAL INJURY. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

MEDICAL AND LIFE SUPPORT APPLICATIONS: Socket does not recommend the use of any products for medical or life support application wherein a failure or malfunction of the product may directly threaten life or cause injury and Socket will not knowingly sell its products for such use except pursuant to a written exception to this policy granted on a case-by-case basis. No warranty is made with respect to any such medical or life support use of any product.

Some states do not allow limitation of implied warranties, or the exclusion or limitation of incidental or consequential damages, so that the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

This product may contain fully tested, recycled parts, warranted as if new.

For warranty information, phone (510) 744-2700.

Limited Software Warranty

LIMITED WARRANTY. SOCKET warrants that the original disk or CD ROM is free from defects for 90 days from the date of delivery of the SOFTWARE.

CUSTOMER REMEDIES. SOCKET'S entire liability and your exclusive remedy shall be, at SOCKET'S option, either (a) return of the price paid or (b) replacement of the SOFTWARE which does not meet SOCKET'S Limited Warranty and which is returned to SOCKET with a copy of your receipt. Any replacement SOFTWARE will be warranted for the remainder of the original warranty period or 30 days, whichever is longer. THESE REMEDIES ARE NOT AVAILABLE OUTSIDE OF THE UNITED STATES OF AMERICA.

NO OTHER WARRANTIES. SOCKET disclaims all other warranties, either express or implied, including but not limited to implied warranties of merchantability and fitness for a particular purpose, with respect to the SOFTWARE and the accompanying written materials. This limited warranty gives you specific legal rights. You may have others which vary from state to state.

NO LIABILITY FOR CONSEQUENTIAL DAMAGES. In no event shall SOCKET or its suppliers be liable for any damages whatsoever (including, without limitation, damages for loss of business profits, business interruption, loss of business information, or other pecuniary loss) arising out of the use of or inability to use the SOFTWARE, even if SOCKET has been advised of the possibility of such damages. Because some states do not allow the exclusion or limitation of liability for consequential or incidental damages, the above limitation may not apply to you.

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Copyright Notice

Regulatory Compliance

The Socket Bluetooth GPS Receiver is designed to be compliant with the rules and regulations in locations where they are sold and will be labeled as required. This product is type approved — users are not required to obtain license or authorization before using.

This product has been certified as conforming to technological standards. Therefore, the following actions are punishable by law:
- Disassembly or modification of this product
- Removal of identification labels on the back of the product

The frequency used by this product is also used by industrial, scientific and medical devices, such as microwave ovens, as well as wireless detectors for motion detectors, such as those requiring licenses used on manufacturing lines or similar radio transmitters (all of these wireless devices will be called "other wireless transmitters" below).

1. Before using this system, confirm that other wireless transmitters are not in use nearby.
2. In the unlikely event that there is electronic interference between this system and other wireless transmitters, quickly change the location of operation or stop operating the unit (cease signal transmission).
3. If other electrical interference or related problems occur, contact Socket technical support at +1-510-744-2720.

Radio Frequency Interference Requirements

This device complies with part 15 of the FCC rules and Industry Canada RSS 210. Operation is subject to the following conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CAUTION: Change or modification not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This equipment is ETS 300 328-2, ETS 301 489-1 and ETS EN301 489-17 compliant. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his or her own expense.

In order for this device to comply with FCC rules, under the provision of Part 15.247(b)(c), it must operate in a manner that ensures that the public is not exposed to radio frequency levels in excess of the Maximum Permissible Exposure (MPE) limits.

To comply with Industry Canada RF exposure compliance requirements, the following antenna installation and device operating configurations must be satisfied: "The installer of this radio equipment must ensure that the antenna is located or pointed such that it does not emit RF field in excess of Health Canada limits for the general population; consult Safety Code 6, obtainable from Health Canada's website: www.hc-sc.gc.ca/ehp/ehd/catalogue/rpb.htm

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user may try to correct the interference by one or more of the following:
- Reorient or relocate the receiving antenna of the radio or television.
- Increase the distance separating the equipment and the receiver.
- Connect the equipment to an outlet on a different branch circuit than that of the receiver.
- Consult the dealer or an experienced radio/TV technician for help.

The user may find the following booklet helpful: *How to Identify and Resolve Radio-TV Interference Problems.* This booklet is available from the U.S. Government Printing Office, Washington, D.C. 20402.

Radio Frequency Interference Requirements – Canada
This Class B digital apparatus meets the requirements of the Canadian Interference-Causing Equipment Regulations. Cet appareil numérique de la Classe B respecte toutes les exigencies du Reglement sur le Matériel Brouilleur du Canada.

NOTE: To comply with FCC and Industry Canada exposure requirements, this device is approved for operations in a user's hand when there is a distance of 20 cm or more between the device antenna and the user's body.

CE Marking & European Union Compliance

Products intended for sale within the European Union are marked with a CE Mark, which indicates compliance to applicable Directives and European Normes (EN), as follows. Amendments to these Directives or ENs are included: Normes (EN), as follows:
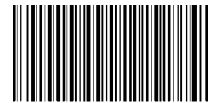
Applicable Directives:
- R&TTE Directive 1999/5/EC
- Low Voltage Directive 73/23/EEC

Applicable Standards:
- EN 55 022 – Limits and Methods of Measurement of Radio Interference Characteristics of Information Technology Equipment.
- EN 50 082-1 – Electromagnetic Compatibility – General Immunity Standard, Part 1: Residential, Commercial, Light Industry.
- IEC 801.2 – Electromagnetic Compatibility for Industrial Process Measurement and Control Equipment, Part 2: Electrostatic Discharge Requirements.
- IEC 801.3 – Electromagnetic Compatibility for Industrial Process Measurement and Control Equipment, Part 3: Radiated Electromagnetc Field Requirements.
- IEC 801.4 - Electromagnetic Compatibility for Industrial Process Measurement and Control Equipment, Part 4: Electrical Fast Transients Requirements.
- EN 60 950 + Amd 1 + Amd 2 – Safety of Information Technology Equipment Including Business Equipment

Note that the radio frequency band used by this equipment has not been harmonized in all the EU.

Applicable area (nation): Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Norway, Portugal, Spain, Sweden, Switzerland, The Netherlands, United Kingdom